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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,961	06/17/2005	Francesca Pignagnoli	62437	6667
109	7590	12/08/2005	EXAMINER	
THE DOW CHEMICAL COMPANY INTELLECTUAL PROPERTY SECTION P. O. BOX 1967 MIDLAND, MI 48641-1967			COONEY, JOHN M	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/539,961

Applicant(s)

PIGNAGNOLI ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 1105.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner (selected from the group "consisting of" A,B, and C) or alternatively (selected from A, B, or C). See M.P.E.P. 2173.05(h).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hickey et al.(6,359,022), alone, or in view of Chow et al.(3,842,036).

Hickey et al. discloses preparations of rigid closed cell foams prepared from two component foam forming compositions wherein (a.) the polyols component includes aromatic polyester polyol, polyether polyol as desired, alkanes and water as blowing agents, as well as, other blowing agents, including, as a preferable species, formic acid,

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and hydrofluorocarbons, as desired, and other ingredients; (b.) the isocyanate component comprises, at least, specifically, Mondur 489 which is an aromatic isocyanate having a functionality of 3.0, and (c.) the two components are combined at various NCO indexes meeting those of applicants claims (see the abstract, column 1 lines 12-30, column 2 lines 41-51, column 4 lines 66-67, column 11 lines 65-67, column 12 lines 55-57, column 13-15, column 21 lines 2-22, Example 10, Table 5, and claims 15 and 16, as well as, the entire document).

Hickey et al. differs from applicants' claims in that formic acid and hydrofluorocarbons are not particularly required. However, formic acid is exemplified as a most preferred monocarboxylic auxiliary blowing agent (column 14 lines 44-45) and the hydrofluorocarbons of applicants' claims are all recited as acceptable auxiliary blowing agents in Hickey et al.'s disclosure (see column 15 lines 37-53). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the formic acid and hydrofluorocarbon auxiliary blowing agents of Hickey et al. in the preparations of Hickey et al. for the purpose of imparting their foam enhancing and producing effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Hickey et al. differs from applicants' claims in that phenol formaldehyde novolak initiated polyalkylene oxide polyols are not exemplified as species in the description of the preferentially employed polyoxyalkylene polyether additional polyols of Hickey et al.'s invention (column 11 lines 65-67). However, Chow et al. discloses phenol

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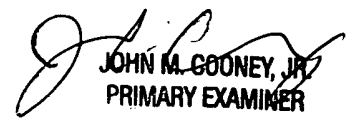
formaldehyde novolak initiated polyalkylene oxide polyols to be useful polyether polyols in the formation of rigid polyurethane and polyisocyanurate foams for purposes of assisting in rigidity contribution and enhancing strength and stability properties in products formed (see column 1 line 46- column 3 line 22, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the phenol formaldehyde novolak initiated polyalkylene oxide polyols of Chow et al. as the additionally employed polyoxyalkylene polyols in the preparations of Hickey et al. for the purpose of imparting their rigidity, strength, and stability contributing effect to the products realized in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' provide no structure to their laminate other than requiring that the foam material be present. Accordingly, no patentable weight is afforded the limitations of claim 15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700